

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virginia 22313-1450 www.nepio.gov

ELECTRONIC

11/30/2009

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.      |  |
|---|-------------|----------------------|---------------------|-----------------------|--|
| 10/589,154  | 05/04/2007  | Olivier Chevalier    | VANM199.010APC      | 6783                  |  |
| 20995 T590 LIV202099<br>KNOBBE MARTENS OLSON & BEAR LLP<br>2040 MAIN STREET |             |                      | EXAM                | EXAMINER              |  |
|   |             |                      | MUKHOPADHY          | MUKHOPADHYAY, BHASKAR |  |
| FOURTEENTH FLOOR<br>IRVINE, CA 92614  |             | ART UNIT             | PAPER NUMBER        |                       |  |
|   |             | 1794                 |                     |                       |  |
|   |             |                      |                     |                       |  |
|   |             |                      | NOTIFICATION DATE   | DELIVERY MODE         |  |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com eOAPilot@kmob.com

# Application No. Applicant(s) 10/589,154 CHEVALIER ET AL. Office Action Summary Examiner Art Unit BHASKAR MUKHOPADHYAY 1794 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 24 September 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-15.18-22.25-28 and 31-36 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-15,18-22,25-28 and 31-36 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date 20060811.

Paper No(s)/Mail Date.

6) Other:

5) T Notice of Informal Patent Application

Application/Control Number: 10/589,154 Page 2

Art Unit: 1794

### DETAILED ACTION

#### Specification

 The abstract of the disclosure is objected to because it contains more than 150 words. Correction is required. See MPEP § 608.01(b).

# Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- Claims 8, 14, 18, and 35-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. Regarding claim 8, the scope of the claim is confusing given that it depends on itself. The examiner is considering claim 8 to properly depend on claim 7 in light of paragraph 87 of the specification.
- 5. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 14, it is not clear what is meant by 'firmness of the gelling glaze is at least multiplied by factor 2 after contact with the food support".

Art Unit: 1794

 Claim 18 recites the phrase 'for instance with a brush'. In light of the phrase 'for instance', it is not clear if the claim actually requires a brush.

The terms 'easily' and 'easy' in claim 18, are each relative terms which renders the claim indefinite. The terms 'easily' and 'easy' are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

7. Claim 35 recites improper Markush language. Applicants are advised to change "from the list consisting of bakery cream, cakes, bread, danish pastry, puffed pastry, and fruits and/or combination thereof" to "from the group consisting of bakery cream, cakes, bread, danish pastry, puffed pastry, fruits and combinations thereof".

### Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1794

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1,
 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.
- Claims 1-4, 6-15, 18-22, 25- 27, 28, 31 36 are rejected under 35 U.S.C.
   (a) as being unpatentable over NPL "Apricot Glaze" in view of Wiggett et al.(
   GB 2078082) and Smadar (USPN 3650766).
- 11. Regarding claims 1-4, 7-9, 11-14, 18-22, 25, 27, 31, 33, 34-36, "Apricot Glaze" teaches about apricot glaze as a thin liquid (line 1, e.g. 'Liquid') pastry glaze (e.g. in line 6, "To prevent soggy pastry crust" and line 9, "glaze for fruit tarts") brushed on food products (Line 2, e.g. 'brushed') like pastry and fruit tarts (line 6, "pastry" and line 9, 'fruit tart').

"Apricot Glaze" does not teach about glaze composition obtained by solubilizing calcium (II), reactive low methoxylated –amidated pectin.

Wiggett et al. teach about a fruit composition comprising 10-50% fruit (abstract), soluble calcium chloride to promote gelation (p2, lines 56-60), and gelling agent that is low methoxy-amidated pectin with degree of esterification of 25-40% and degree of amidation of 15-30% (claim 11).

Art Unit: 1794

Wiggett et al. also teach about the glaze composition further comprising another gelling agent from the group locust bean, xanthan, or guar gum (p2, lines 45-48, e.g. 'xanthan gum', 'guar gum'). Wiggett et al. also teach about the pH of the composition is between 3.0 to 4.2 (p1, line 64, e.g. 'pH 3.0 to 4.2).

Wiggett et al. also teach about the available calcium ion will be added in the spreadable food composition which is determined on a trial and experiment basis because of the many factors like hardness of water, type of fruit (p1, under specification, lines 66-90, in line 72, e.g. 'determined on a trial and experiment basis').

Regarding claims 6 and 32, Wiggett et al. teach about soluble calcium chloride (p2, lines 56-60, e.g. "calcium chloride) between 20-50 mg of Ca / gm pectin (p1, line 49, 0.5 to 1.0 % pectin and p3 line 14, , e.g. '.8% low methoxyl pectin and p3, line 11, 20-50 mg Ca/g pectin). It is obvious that it meets the claimed ranges of up to about 50 ppm and about 15 ppm to promote gelation

Regarding claim 10, Wiggett et al. disclose the use of 15 % amidated pectin, while the present claim 10 requires about 14% pectin.

It is apparent, however, that the instantly claimed amount of about 14% and that taught by Wiggett are so close to each other that the fact pattern is similar to the one in In re Woodruff, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and

Art Unit: 1794

prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the amount of 15% disclosed by Wiggett and the amount disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the amount of about 14% disclosed in the present claim 10 is but an obvious variant of the amounts disclosed in Wiggett, and thereby one of ordinary skill in the art would have arrived at the claimed invention.

Regarding claims 15, 26, 28, "Apricot Glaze" teaches about a protective coating which "Glaze" (line 5). It is obvious that the brushing the glaze makes a protective coating due to formation of gel.

"Apricot Glaze" does not teach about the formation of gel.

Wiggett et al. teach about the spreadable fruit composition and gum as the thickener (p2, lines 45-62, e.g. in line 43, 'gelling agent' and in line 59, e.g. "spreadable fruit composition'). Wiggett et al. also teach about soluble solids content of 40-50% (claim 4) and pH range of the composition is 3.0 to 4.2 (p1, under 'specification', line 64, e.g. pH 3.0-4.2). It is obvious that soluble solids content of 40-50% represents the Brix value in the range of 50 degree -60 degree. It is also obvious that the glaze is easily cut-able due to formation of a thickness due to gelling agent and thus no flowing down problems will arise.

"Apricot Glaze" and Wiggett do not teach about the jellification needs extra amount of calcium ions when applied onto a food product.

Art Unit: 1794

Smadar teaches about the use of methoxy pectin and calcium chloride to form a gel like skin coating skin around the extruded product (col 2, line 73, e.g. 'methoxy pectin, col 3, lines 11-12, e.g. 'the strength of the skin can be controlled by varying the concentration of alkaline earth salts' and line 23, 'alkaline earth metal ions' preferably calcium ions') and possible ways of application onto a food product supplementing extra calcium by using the slurry composition containing the skin forming material and contacted with a source of alkaline earth ions which causes an impervious gel skin structure to immediately form on outer surfaces of the shaped foods (col 3, lines 50-55, e.g. ''contacted with a source of alkaline earth ions'). Thus it is obvious that the extra calcium source may be considered prior to application and appropriate for jellification after application.

Smadar also teaches about by controlling the ion concentration, and/or exposure time varying skin strength may be achieved (Col3 lines 10-20, e.g. 'The strength of the skin can also be controlled by varying ion concentration, time of exposure etc.). It is thus obvious that the firmness of the skin in the form of gelling glaze may be achieved by multiplication of factor 2 varying calcium ion concentration, exposure time etc. Therefore, it would have been obvious to one of ordinary skill to choose amounts of calcium ions, including that presently claimed, such that there is no jellification before application to food but the glaze does jellify when applied onto food product that provides extra amount of calcium ion.

It would have been obvious to one of ordinary skill in the art at the time of invention to include the teaching of Smadar, Wiggett into "Apricot Glaze". One of

Art Unit: 1794

ordinary skill in the art would have been motivated to use low methoxylatedamidated pectin which has the property of more calcium reactivity to obtain good gel and good resistance to syneresis (p2, lines 103-105, e.g. ' resistance to syneresis') and to use thickener in the composition so that after application of protective coating, the glaze composition will form a gel at ambient temperature so that the coating layer can be attached firmly with the product.

Claim 5 is rejected under 35 U.S.C. 103 (a) as being unpatentable over "
 Apricot Glaze" in view of Wiggett et al. and Smadar and further in view of
 Holscher et al., USPN 4,762,721.

Regarding claim 5, "Apricot Glaze" in view of Wiggett et al. and Smadar does not teach about thixotropic property.

Holscher et al. teach about thixotropic property of a glazing composition with the addition of xanthan gum (col 1, lines 55-67, e.g. 'thixotropic property').

It would have been obvious to one of ordinary skill in the art at the time of invention to include the teaching of Holscher et al. into Apricot Glaze in view of Wiggett et al. One of ordinary skill in the art would have been motivated to use xanthan gum as gelling agent which will function as thixotropic agent and will prevent the glaze from dripping off when used on curved surface ( Col 1, lines 65-68, e.g., 'thixotropic properties').

Art Unit: 1794

Claims 1-4, 6-15, 18-22, 25- 27, 28, 31 - 36 are rejected under 35 U.S.C.
 (a) as being unpatentable over Miller C, USPN 1,761,738 in view of Wiggett et al. (GB 2078082) and Smadar (USPN 3650766).

Regarding claims 1-4, 7-9, 11-14, 18-22, 25, 27, 31, 33, 34-36, Miller. C teaches about Pastry (page1, line1) and Pastry Glaze composition (p1, lines 72-78, e.g. 'in making the glaze I).

Miller, C does not teach about glaze composition obtained by solubilizing calcium (II), reactive low methoxylated –amidated pectin.

Wiggett et al. teach about a fruit composition comprising 10-50% fruit (abstract), soluble calcium chloride to promote gelation (p2, lines 56-60), and gelling agent that is low methoxy-amidated pectin with degree of esterification of 25-40% and degree of amidation of 15-30% (claim 11).

Wiggett et al. also teach about the glaze composition further comprising another gelling agent from the group locust bean, xanthan, or guar gum (p2, lines 45-48, e.g. 'xanthan gum', 'guar gum'). Wiggett et al. also teach about the pH of the composition is between 3.0 to 4.2 (p1, line 64, e.g. 'pH 3.0 to 4.2).

Wiggett et al. also teach about the available calcium ion will be added in the spreadable food composition which is determined on a trial and experiment basis because of the many factors like hardness of water, type of fruit (p1, under specification, lines 66-90, in line 72, e.g. 'determined on a trial and experiment basis').

Art Unit: 1794

Regarding claims 6 and 32, Wiggett et al. teach about soluble calcium chloride (p2, lines 56-60, e.g. "calcium chloride) between 20-50 mg of Ca / gm pectin (p1, line 49, 0.5 to 1.0 % pectin and p3 line 14, e.g. '.8% low methoxyl pectin and p3, line 11, 20-50 mg Ca/g pectin). It is obvious that it meets the claimed ranges of up to about 50 ppm and about 15 ppm to promote gelation

Regarding claim 10, Wiggett et al. disclose the use of 15 % amidated pectin, while the present claim 10 requires about 14% pectin.

It is apparent, however, that the instantly claimed amount of about 14% and that taught by Wiggett are so close to each other that the fact pattern is similar to the one in In re Woodruff, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the amount of 15% disclosed by Wiggett and the amount disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the amount of about 14% disclosed in the present claim 10 is but an obvious variant of the amounts disclosed in Wiggett, and thereby one of ordinary skill in the art would have arrived at the claimed invention.

Art Unit: 1794

Regarding claims 15, 26, 28, "Apricot Glaze" teaches about a protective coating which "Glaze" (line 5). It is obvious that the brushing the glaze makes a protective coating due to formation of gel.

"Apricot Glaze" does not teach about the formation of gel.

Wiggett et al. teach about the spreadable fruit composition and gum as the thickener (p2, lines 45-62, e.g. in line 43, 'gelling agent' and in line 59, e.g. "spreadable fruit composition'). Wiggett et al. also teach about soluble solids content of 40-50% (claim 4) and pH range of the composition is 3.0 to 4.2 (p1, under 'specification', line 64, e.g. pH 3.0-4.2). It is obvious that soluble solids content of 40-50% represents the Brix value in the range of 50 degree -60 degree. It is also obvious that the glaze is easily cut-able due to formation of a thickness due to gelling agent and thus no flowing down problems will arise.

"Apricot Glaze" and Wiggett do not teach about the jellification needs extra amount of calcium ions when applied onto a food product.

Smadar teaches about the use of methoxy pectin and calcium chloride to form a gel like skin coating skin around the extruded product (col 2, line 73, e.g. 'methoxy pectin, col 3, lines 11-12, e.g. 'the strength of the skin can be controlled by varying the concentration of alkaline earth salts' and line 23, 'alkaline earth metal ions' preferably calcium ions') and possible ways of application onto a food product supplementing extra calcium by using the slurry composition containing the skin forming material and contacted with a source of alkaline earth ions which causes an impervious gel skin structure to immediately form on outer surfaces of the shaped foods (col 3, lines 50-55, e.g. 'contacted with a source of

Art Unit: 1794

alkaline earth ions'). Thus it is obvious that the extra calcium source may be considered prior to application and appropriate for jellification after application.

Smadar also teaches about by controlling the ion concentration, and/or exposure time varying skin strength may be achieved (Col3 lines 10-20, e.g. 'The strength of the skin can also be controlled by varying ion concentration, time of exposure etc.). It is thus obvious that the firmness of the skin in the form of gelling glaze may be achieved by multiplication of factor 2 varying calcium ion concentration, exposure time etc. Therefore, it would have been obvious to one of ordinary skill to choose amounts of calcium ions, including that presently claimed, such that there is no jellification before application to food but the glaze does jellify when applied onto food product that provides extra amount of calcium ion.

It would have been obvious to one of ordinary skill in the art at the time of invention to include the teaching of Smadar, Wiggett into Miller, C. One of ordinary skill in the art would have been motivated to use low methoxylated-amidated pectin which has the property of more calcium reactivity to obtain good gel and good resistance to syneresis (p2, lines 103-105, e.g. 'resistance to syneresis') and to use thickener in the composition so that after application of protective coating, the glaze composition will form a gel at ambient temperature so that the coating layer can be attached firmly with the product.

Art Unit: 1794

15. Claim 5 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Miller C, USPN 1,761,738 in view of Wiggett et al. and Smadar and further in view of Holscher et al., USPN 4,762,721.

Regarding claim 5, Miller in view of Wiggett et al. and Smadar does not teach about thixotropic property.

Holscher et al. teach about thixotropic property of a glazing composition with the addition of xanthan gum (col 1, lines 55-67, e.g. 'thixotropic property').

It would have been obvious to one of ordinary skill in the art at the time of invention to include the teaching of Holscher et al. into Miller in view of Wiggett et al. and Smadar. One of ordinary skill in the art would have been motivated to use xanthan gum as gelling agent which will function as thixotropic agent and will prevent the glaze from dripping off when used on curved surface ( Col 1, lines 65-68, e.g. 'thixotropic properties').

#### Conclusion

 Any inquiry concerning the communication or earlier communications from the examiner should be directed to Bhaskar Mukhopadhyay whose telephone number is (571)-270-1139.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571)-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B.M. / Patent Examiner, Art Unit 1794

/Callie E. Shosho/ Supervisory Patent Examiner, Art Unit 1794